

Message

From: Belisle, Michelle A [michelle.a.belisle@esso.ca]
Sent: 8/6/2019 8:47:57 PM
To: Westin Massey [Westin.Massey@Tceq.Texas.Gov]
CC: Moore, Gary [Moore.Gary@epa.gov]; spill12 [spill12@tceq.texas.gov]; 'craig.hill@pcs.hctx.net' [craig.hill@pcs.hctx.net]; R12WQ [R12WQ@tceq.texas.gov]; Linville, Kristine K [kristine.k.linville@exxonmobil.com]
Subject: RE: ExxonMobil - Baytown Olefins Plant - 8/4
Attachments: Figure 1 WFD from ExxonMobil BOP 2018 TPDES Application 1-30-18-2_markup.pdf; Figure 2 BOP Simplified Site Sewer Diagram.pdf; Attachment SPIF-1 from ExxonMobil BOP 2018 TPDES Application 1-30-18.pdf

Westin,

Please find below information to answer your questions regarding the special sampling at BOP Outfall 002.

Please note that no firewater has been applied to the impacted area since Friday afternoon (8/2), and water has been pumped from the onsite conveyance system to the BOP retention pond since the last discharge.

The site has experienced a rainfall event this afternoon that may lead to a discharge from the onsite conveyance system via Outfall 002. We would appreciate your consideration and concurrence that special sampling can be stopped, and that the site can return to the standard discharge samples as required by our permit.

Please feel free to reach out with any additional questions.

Regards,

Michelle Belisle

SSHE Dept, Env Section Supervisor

Water, Waste, Flare Consent Decree and Env Coordination

Office: 346-259-7728

Mobile: 832-514-8556

From: Westin Massey [mailto:Westin.Massey@Tceq.Texas.Gov]
Sent: Monday, August 05, 2019 1:03 PM
To: Belisle, Michelle A <michelle.a.belisle@esso.ca>
Cc: 'moore.gary@epa.gov' <moore.gary@epa.gov>; spill12 <spill12@tceq.texas.gov>; 'craig.hill@pcs.hctx.net' <craig.hill@pcs.hctx.net>; R12WQ <R12WQ@tceq.texas.gov>
Subject: RE: ExxonMobil - Baytown Olefins Plant - 8/4

Michelle,

The TCEQ is reviewing your request on the expectation to continue the special sampling beyond your permit requirements for subsequent discharges and the proposal to return to standard required permit samples. In order to complete this review, provide the following documentation:

- Lab results for the analysis listed as "pending." Preliminary results can be submitted as they become available. If the results are preliminary, indicate that as part of the response.
 - An updated summary of all laboratory results received since the previous update is below.
 - We will continue to provide updated analytical data as we receive it.
 - Laboratory packages will be sent by e-mail to Karina Rocha.
- Sample results of any source water analyzed
 - Source water (raw water received from San Jacinto River Authority Canal) for the emergency response in this event was not analyzed.

- Additional documentation/clarification is requested regarding the attached documents that were provided on 8/3/19. For the discharges that occurred between 7/31/19 and 8/2/2019 at Outfall 002 under the TPDES permit WQ0002184000, provide an explanation of the discharge and the discharge route for each event. Drainage and flow diagrams should be provided that clearly show the origin point of the wastewater and the path(s) the wastewater took to reach Outfall 002. The amount of wastewater sent to the ExxonMobil Baytown Refinery Complex wastewater treatment plant (TPDES Permit WQ0000592000) and amount of wastewater diverted to Outfall 002 should be included as part of the response.
 - In addition, provide an explanation as to why the wastewater generated during the response that reached the retention pond for the wastewater treatment plant at the ExxonMobil Baytown Refinery Complex had to be diverted to Outfall 002 (TPDES permit WQ0002184000) during the response.
 - No wastewater was routed from the BOP retention pond to BOP Outfall 002. Water from the onsite conveyance system to BOP Outfall 002 was initially routed to the BOP retention pond through pumps in an abundance of caution to contain what we believe to be non-contact runoff (i.e. overspray, truck connection firewater) that entered the BOP Outfall 002 conveyance. When the BOP Outfall 002 conveyance system level rose to a point where discharge was required, the non-contact runoff was discharged.
 - There are no indications of BOP retention pond overflow conditions at any time in this event based on visual freeboard observations made by process personnel.
 - Attached Figure 1 and 2 are wastewater flow diagrams submitted as part of the TPDES permit WQ0002184000 renewal 1/30/2018, marked up to demonstrate onsite drainage patterns.
 - Location #1 in Figure 1 illustrates the non-contact firewater overspray and incidental usage that did not enter the process unit area; thus entering the BOP Outfall 002 conveyance system through the roadway between the firefighting activities and the impacted area.
 - Portions of this firewater, in addition to the permitted non-process area storm water and site utility wastewaters, was discharged via Outfall 002 as described in the “Discharge Composition” description of each discharge listed in the below discharge summary table and includes available analytical results. Estimated discharge volumes are considered worst case based off of maximum elevations recorded from level instrumentation at BOP Outfall 002.
 - When discharge was required from BOP Outfall 002, special sampling was conducted to verify water quality was not impacted.
 - Location #2 on Figure 1 represents the contact firewater entering the CSS (Contaminated Sewer System), this conveyance is shown on Figure 2 in orange and is pumped to the ExxonMobil Baytown Refinery collection system/WWTP.
 - Location #3 on Figure 1 identifies pump location staged upstream of BOP Outfall 002 capable of diverting water to the BOP retention pond as shown via the dotted red line.
 - Attachment Figure 2 is marked up to demonstrate onsite drainage patterns, showing non-contact firewater overspray conveyance to BOP Outfall 002, as well as the approximate location of CSS collection points.
 - Drainage into the process area is engineered by site grading and directed to the CSS collection points. No contact firewater is believed to have entered the BOP Outfall 002 conveyance system.
 - Attachment SPIF-1, also from the 2018 Permit renewal, illustrates the discharge pathway from BOP Outfall 002 to Goose Creek and ultimately to Tabbs Bay.

BOP Outfall 002 Discharge Summary

	Discharge 1 7/31 16:49 - 8/1 2:23		Discharge 2 8/1 17:29-23:25		Discharge 3 8/2 18:31-23:31			
						TPDES WQ0002184000 Outfall 002 Effluent Limit	TCEQ "Notification Level" TPDES Monitoring and Reporting Requirement 9.b	2018 Permit Application Max Sample Result
Discharge Sample No.	1	2	3	4	5			
Discharge Composition	Rain Water / Emergency FW		Rain Water / Emergency FW / Industrial Water from CT Makeup		Rain Water / Emergency FW / Industrial Water from CT Makeup	---	---	---
Start Time	7/31/2019 16:49	8/1/2019 0:02	8/1/2019 17:29	No Discharge	8/2/2019 18:31	---	---	---
Stop Time	7/31/2019 23:33	8/1/2019 2:23	8/1/2019 23:25	Sample Taken of Retained Water	8/2/2019 23:31	---	---	---
Total Discharge Vol (Mgal)	10.4		7.4	No Discharge	2.1	---	---	---
Discharge Segment Vol (Mgal)	8.4	2.0	7.4	Sample Taken of Retained Water	2.1	Report	---	---
Sample Time	16:35 19:24 (BTEX)	0:55	17:29 (O/G, TOC, pH, Asbestos) 19:00 Special Samples	8/2/2019 0:25	8/2/2019 18:49	---	---	---
pH (S.U.)	7.5	7.33	7.7	7.7	7.8	6 - 9	N/A	7.8
TOC (mg/L)	5.35	22	5.72 BOP Lab 6.71	5.08 BOP Lab	5.7 BOP Lab 6.31	55	N/A	9.8
O&G (mg/L)	< 3.1	1.3 J	1.7 J	1.4 J	< 3.3	15	N/A	< 3.8
Benzene (ug/L)	2.7 J	2.09 J	< 0.56	< 0.56	< 0.56	---	500	< 1
Toluene (ug/L)	< 0.550	< 0.550	< 0.55	< 0.55	< 0.55	---	500	< 1
Ethylbenzene (ug/L)	< 1.29	< 1.29	< 1.29	< 1.29	< 1.29	---	500	< 1
Xylenes (ug/L)	< 0.93	< 0.93	< 0.93	< 0.93	< 0.93	---	500	< 1
CBOD (mg/L)	---	Pending	Pending	Pending	Pending	---	N/A	4.53
TSS (mg/L)	---	77.6	20.8	3.00	13.6	---	N/A	458
Phenolic Compounds (mg/L)*	---	0.00492 J,B	< 0.00276	0.00333 J	< 0.00276	---	0.5	< 1.05
Ammonia as Nitrogen (mg/L)	---	< 0.0254	< 0.0675	< 0.0675	< 0.0675	---	N/A	< 0.25
Nitrate (as N) (mg/L)	---	0.416 F1	0.106 J	0.148 J	0.202	---	Not Toxic (4.82)	0.482
Sulfide (mg/L)	---	0.0311 J,F1	0.0387 F1	< 0.0090	0.0112 J	---	N/A	< 0.01
Chromium, Total (mg/L)	---	0.00423 J	0.00159 J	0.000637	0.000932 J	---	0.5	0.962
Chromium, Hex (mg/L)*	---	0.00595 J	0.0072 J	0.0097 J	0.00754 J,B	---	0.5	7.04
PNA Hydrocarbons (ug/L)	---	5.28 J	< 1.77	< 1.7	Pending	---	---	< 0.2
- acenaphthene	---	< 0.963	< 0.788	< 0.757	Pending	---	500	---
- acenaphthylene	---	< 1.17	< 0.960	< 0.922	Pending	---	500	---
- anthracene	---	< 0.938	< 0.768	< 0.738	Pending	---	500	---
- benzo(a)anthracene	---	< 0.716	< 0.586	< 0.563	Pending	---	500	---
- benzo(b)fluoranthene	---	< 0.778	< 0.656	< 0.612	Pending	---	500	---
- benzo(k)fluoranthene	---	< 0.407	< 0.333	< 0.320	Pending	---	500	---
- benzo(ghi)perylene	---	< 0.827	< 0.677	< 0.650	Pending	---	500	---
- benzo(a)pyrene	---	< 0.642	< 0.525	< 0.505	Pending	---	500	---
- chrysene	---	< 0.815	< 0.667	< 0.641	Pending	---	500	---
- dibenzo(a, h)anthracene	---	< 1.26	< 1.03	< 0.990	Pending	---	500	---
- fluoranthene	---	1.54 J	< 1.07	< 1.03	Pending	---	500	---
- fluorene	---	< 1.12	< 0.919	< 0.883	Pending	---	500	---
- indeno(1, 2, 3- cd)pyrene	---	< 2.16	< 1.77	< 1.7	Pending	---	500	---
- naphthalene	---	< 1.05	< 0.859	< 0.825	Pending	---	500	---
- phenanthrene	---	1.58 J	< 0.798	< 0.767	Pending	---	500	---
- pyrene	---	2.16 J	< 0.909	< 0.874	Pending	---	500	---
Ethylene (mg/L)	---	< 0.00055	< 0.00055	< 0.00055	Pending	---	N/A	---
Propane (mg/L)	---	< 0.00050	< 0.00050	< 0.00050	Pending	---	N/A	---
Propylene (mg/L)	---	0.00119 J	< 0.0010	< 0.0010	Pending	---	N/A	---
Asbestos (MFL)	---	< 4.42	< 0.66	< 0.66	Pending	---	N/A	---
Metals (ug/L)	---	---	---	---	---	---	N/A	---
- aluminum	---	2910 F1	1240 F1	215	265	---	Not Toxic (3,320)	332
- antimony	---	6.4	3.53 J	< 1.5	< 1.5	---	1030	0.536
- arsenic	---	5.08	2.75	2.39	2.65	---	500	2.02
- Barium	---	115	76.6	69.4	64.9	---	Not Toxic (661)	65.1
- Beryllium	---	0.163 J	< 0.103	< 0.103	< 0.103	---	500	< 0.155
- Cadmium	---	0.075 J	0.075 J	0.075 J	< 0.0532	---	500	< 1
- Chromium, trivalent	---	< 1.55	< 1.55	< 1.55	< 1.55	---	500	< 1.55
- Copper	---	7.41	3.22	1.64 J	1.79 J,B	---	500	2.96
- Lead	---	4.52	1.67	0.376 J	0.357 J	---	500	0.61
- Mercury	---	< 0.103	Pending	< 0.103	< 0.103	---	500	0.00265
- Nickel	---	3.55	2.15	1.34 J	1.46 J	---	500	1.7
- Selenium	---	< 0.315	< 0.315	< 0.315	0.611 J,B	---	500	0.702
- Silver	---	< 0.404	< 0.404	< 0.404	< 0.404	---	500	0.301
- Thallium	---	< 0.153	< 0.153	< 0.153	< 0.153	---	500	< 0.028
- Zinc	---	113 B	83.2 F1,F2	45.6	56.9	---	502	50.2

* Units of measure corrected from initial Supplemental Discharge Information provided

Qualifier: Description

B - Compound was found in the blank and sample.

F1 - MS and/or MSD Recovery is outside acceptance limits.

J - Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.

F2 - MS/MSD RPD exceeds control limits

Please let me know if you have any questions,

Westin Massey

Water Section Manager, Houston Region
Texas Commission on Environmental Quality
Region 12 • Houston • Water Section
5425 Polk Street, Suite H, Houston, TX 77023
Direct: 713-767-3756 • Fax: 713-767-3691

From: Belisle, Michelle A <michelle.a.belisle@esso.ca>
Sent: Sunday, August 4, 2019 4:08 PM
To: 'moore.gary@epa.gov' <moore.gary@epa.gov>; spill12 <spill12@tceq.texas.gov>; 'craig.hill@pcs.hctx.net' <craig.hill@pcs.hctx.net>; R12WQ <R12WQ@tceq.texas.gov>
Subject: RE: ExxonMobil - Baytown Olefins Plant - 8/4

Gary/TCEQ/Craig,

This e-mail contains a summary of the day's activities as requested.

The ICS structure at Baytown Olefins Plant has been stood down as of approximately 15:30 this afternoon as the site moves into a recovery mode of operations.

I would propose that this is the last status update that is provided to this distribution list unless anyone objects.

Daily Summary

- The site has completed perimeter and downwind air monitoring through the day. All results were non-detect.
 - As discussed with Tina Tran (TCEQ) at 15:43 this afternoon, we are no longer completing perimeter and downwind monitoring as of 16:00 on 8/4 as site flaring emissions are within authorized permitted levels (achieved earlier this afternoon)
- We continue to progress any remaining equipment through safe stable hold points or to a shutdown state
- Outfall 002:
 - No discharges since last update
 - Clarification sent that water to Outfall 002 conveyance system was overspray, non-contact with the process equipment impacted was sent yesterday afternoon. Proposing to stop the additional sampling and return to standard required permit samples for subsequent discharges.
 - Awaiting confirmation from TCEQ on this proposal

Please feel free to reach out to me with any questions.

Regards,

Michelle Belisle

SSHE Dept, Env Section Supervisor
Water, Waste, Flare Consent Decree and Env Coordination
Office: 346-259-7728
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From: Belisle, Michelle A

Sent: Saturday, August 03, 2019 6:33 PM

To: 'moore.gary@epa.gov' <moore.gary@epa.gov>; 'spill12@tceq.texas.gov' <spill12@tceq.texas.gov>; 'craig.hill@pcs.hctx.net' <craig.hill@pcs.hctx.net>; 'R12WQ@tceq.texas.gov' <R12WQ@tceq.texas.gov>

Subject: RE: ExxonMobil - Baytown Olefins Plant - 8/3

Gary/TCEQ/Craig,

This e-mail contains the requested summary of the day's activities as requested.

TCEQ contacts:

- Please advise on your expectations for continued fence line air monitoring.
- Please advise on your expectations for continued special sampling required for outfall 002 discharges

Daily Summary

- The site continues to complete perimeter and downwind air monitoring. All results today were non-detect
 - The 'all clear' was given to the community this morning
- Benzene levels on-site in the hot zone also continue to be below 0.5ppm, and are essentially zero at nearly all readings
- We had a successful night of de-inventorying achieving 100% of the planned equipment at a liquid free state.
- Plans for the next days are to continue to progress getting the other process units in the plant into safe stable hold points or to a shutdown state
- Outfall 002:
 - Opened 18:30 - Closed at 23:31 on 8/2
 - Summary of discharge times, volumes, and available analytical has been sent to this distribution list in the noon hour today
 - All sample results that we have been received to date are well within permit requirements (oil and grease and TOC), and essentially non-detect for all special samples.
 - Fire water is no longer being applied to the tower (since the afternoon of 8/2), and therefore no longer entering the onsite canal
 - With only routine water to the on-site canal, we are proposing to stop the additional sampling and return to standard required permit samples for subsequent discharges.

Please feel free to reach out to me with any questions.

A summary will be provided tomorrow after the end of day site debrief.

Regards,

Michelle Belisle

SSHE Dept, Env Section Supervisor

Water, Waste, Flare Consent Decree and Env Coordination

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From: Belisle, Michelle A

Sent: Friday, August 02, 2019 7:22 PM

To: moore.gary@epa.gov; spill12@tceq.texas.gov; craig.hill@pcs.hctx.net

Subject: ExxonMobil - Baytown Olefins Plant - 8/2

Gary/TCEQ/Craig,

This e-mail contains the requested summary of the day's activities as requested.

- The site continues to complete perimeter and downwind air monitoring. All results today were non-detect
- No community air monitoring is being conducted by ExxonMobil as the fence line results continue to show no detection
- Benzene levels on-site in the hot zone also continue to drop and are now all below 0.5ppm
- We had a successful day with an estimated 80% of the planned equipment at a liquid free state.
 - Work priorities for the site continue to be de-inventorying the unit
 - Estimating to be liquid free in the planned equipment in the next 12-24 hours
- Outfall 002:
 - Closed at 23:25 on 8/1
 - Summary of discharge times, volumes, and available analytical has been sent to TCEQ
 - With the rain received Outfall 002 was just opened just past 6pm
 - We will be taking the special analytical sampling as discussed with TCEQ on 7/31 as well as the discharge samples required in our TPDES Permit
 - A summary of will be provided tomorrow with discharge timing, estimated volumes and any analytical received
 - Fire water is no longer being applied to the tower, and therefore no longer entering the onsite canal
 - Limited fire water application occurred early in the day (less than an hour total application all day)
 - With only routine water to the on-site canal, we are proposing to stop the additional sampling and return to standard required permit samples for subsequent discharges.

Please feel free to reach out to me with any questions.

A summary will be provided tomorrow after the end of day site debrief.

Regards,

Michelle Belisle

SSHE Dept, Env Section Supervisor

Water, Waste, Flare Consent Decree and Env Coordination

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